TEKTRONIX

4020 Series

From alphanumerics to graphics: Now your terminals can keep pace with your needs.

"Help Wanted: Smart terminal to grow with innovative company..."

Introducing the Tektronix 4020 Series. After years of temporary help, you can hire a terminal with a future. We think this is the most advanced terminal series of its kind. A series that combines unexcelled alphanumeric and editing capabilities with built-in intelligence and the capacity to grow. The 4025 grows first into forms ruling. Then all the way to graphics.

Where forms ruling will meet your maximum requirements, you can take on our 4024. In either case, you can keep to Tektronix quality while employing exactly the potential you plan to need.

These are the kind of job applicants you always hope to find: Smart. Reliable. Precisely adapted to the job. Talented enough to take on new responsibilities without detriment to the old ones.

The 4025 is the first terminal expressly engineered to handle graphics, data entry and editing, without one compromising another. Its familiar office keyboard makes data entry as easy as typing. Its easy-to-read, 34-line deep screen is just the right proportion for graphics, or for graphics-plus-alphanumerics in any combination.

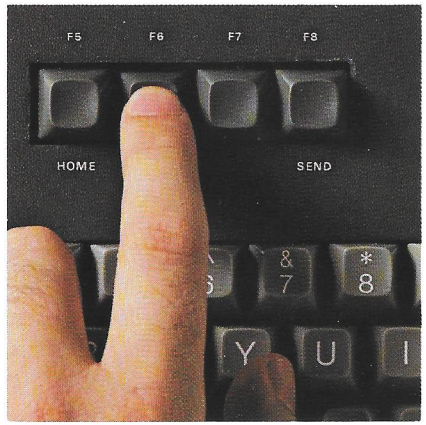
The 4025 is upward expandable. Start with alphanumerics only. Add the forms ruling option later. And when you're ready for it, step up to graphics. Graphics well beyond the range of anyone but Tektronix, the world's graphics leader.

But even at the alphanumerics level, you're getting the best. We're already well known for high performance alphanumerics. In a 1976 Datapro survey, our 4023 was ranked in the top three of 154 alphanumeric terminals. The new generation 4020 Series continues its predecessor's reputation for outstanding alphanumerics in a priced-right package.

It's a package that includes complete upper and lower case ASCII with easy-on-the-eyes video display. Standard 4K memory expandable to 32K, allowing buffering and scrolling of hundreds, even thousands of words.

Hands-on convenience. Clearly defined editing keys let you insert or delete both lines and characters.

There are 13 keys dedicated to user definition. But in fact, virtually the whole keyboard can be quickly redefined. You can, for example, teach strings of characters to just about any key.



While virtually the entire 4020 Series keyboard is user programmable, 13 keys (26 functions) are dedicated to user definition. A single key might be redefined to execute a program, or to call a form from the computer.

The 4020 Series easily adapts to polling environments. Several terminals can be polled from one 4025 equipped with an optional integrated polling controller.

Easy interfacing, optional polling. Because the 4020 Series uses English formatted command sequences, they're naturally compatible with your operating system. By using our optional, integrated 4025 polling controller, you can poll multiple terminals on a single data communications line.

For presentations, you can easily connect the 4025 to any normal video display unit or monitor.

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FILE NO.
POLICI NO.
POLICY PERIOD
MM DD YY MM DD YY
LIAB
PIP
COMP
COLL
DLIM
SR22
INSURED
INSURED ADDRESS
CITY
ST
ZIP
VEHICLE
LOSS PAYEE
BANK ADDRESS
DATE OF LOSS
MM DD YY
AGENT
CAGE
CSYM
TERR
DCLS
DCAT
N RESERVE
TYPE
AMOUNT
N RESERVE
TYPE
AMOUNT
Tektronix 4025
Tektronix

Tektronix 4025
Tektronix
F1
F2
F3
F4
F5
F6
F7
F8
F9
F10
F11
F12
HOME
SEND
DELETE CHAR
DELETE LINE
ERASE & SKIP
INSERT LINE
INSERT MODE
TTY LOCK
NUMERIC LOCK
COMMAND LOCK OUT
LEARN
STATUS
FT
RUB OUT
LINE FEED
BK SP
TAB SPC
RETURN
SHIFT
BREAK
ERASE
ESC
TAB
CTRL
SHIFT

"...must adapt to challenges of many forms..."

Treat your terminal like any other job applicant: make it fill out a form. How quickly and completely it finishes the job is a sure indication of its adaptability to new situations. Especially new situations like editing and forms construction.

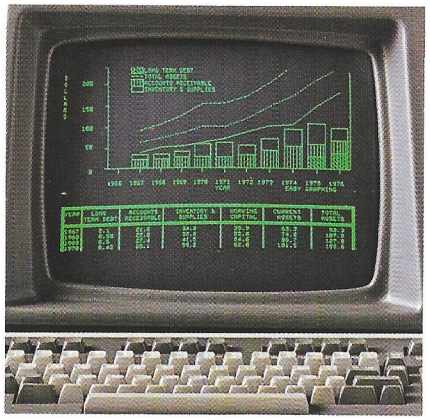
Add the 4020 forms ruling option, and you've added the ability to recreate virtually any source document. Your programmers can construct any form locally and store it in the host. The terminal will recall it from the computer at operator command.

We've not only made formatting simple, we've made the forms and tables easier to enter and edit than paper documents themselves. All formats can be stored, recalled, updated and edited.

You can divide the screen into two essentially separate display areas, each with independent scrolling. You can specify a monitor area for commands and communications with the host, and a workspace area for the form itself. You need never clutter the display or invite confusion by overlaying commands on program results.

Highlight or protect any portion of the screen. Visual attributes include enhanced, blank, blinking fields on the 4024, and also on the 4025, inverted and underlined fields. Logical attributes include modified, alphanumeric and numeric-only. The "send modify" command streamlines data entry by transferring to the host only the modified, keyed-in data. The fixed format remains, ready for the next series of entries.

Some other convenience features: A Ruling Character Set that lets you select from a wide variety of single and multiple horizontal and vertical rules, so you can develop or duplicate forms of any complexity. An easy-on-the-eyes green-on-black display, rather than white phosphors, with adjustable brightness level. And typewriter-paired, rather than ASCII paired keys that mean your operators will be immediately comfortable with the keyboard.



Both the 4020 Series terminals can define separate monitor and workspace areas with individual scrolling. With the 4025, not only can you scroll graphics as well as alphanumerics, you can enter more than one graphics region into memory.

Add-on memory capacity and unique scrolling capability help you tame the toughest and longest of forms. For order entry, inventory control, and many other applications, you can appreciate these qualifications just by reading between the lines.

And you'll appreciate them all the more when you get too busy for words. When you need the advantages of a graphics assist.

In any kind of statistical analysis, a graph says in a single picture what words fail to describe: Concepts. Trends. The substance and interrelationships of ideas. At any time, the 4025 graphics option can help turn printout that no one has the time to read into instantly meaningful information.

Our 4631 Hard Copy Unit can produce clean, dry 8½ x 11" paper duplicates in seconds. It can copy the full screen plus 19 lines in memory, of either the work space or monitor area.

The day is coming when all terminals will include graphics. The 4025 lets you start providing for graphics today.

"...expected to make visible improvements in department productivity..."

If you asked for a resume of the 4025, we'd show you a report like the one below. It's a case where one page tells the whole story. It shows how the terminal you originally hire for elementary data entry can evolve into a forms expert, and from there into a unique graphics analyst.

We believe this is the world's finest report generation terminal. No competitive display is so properly proportioned for graphics. Or for graphics-plus-alphanumerics. With no other terminal can you put graphics anywhere onto the screen: That means total format flexibility. Graphics scrolling. Several graphs on a single page. It means alphanumeric program commands can be placed away from the graphics, rather than run through it.

Our complementary PLOT 10 Easy Graphing software is designed to be easy on the non-programmer. English-language command code and elementary tutorial manual mean anyone can be graphing interactively within minutes after first sitting down at the terminal.

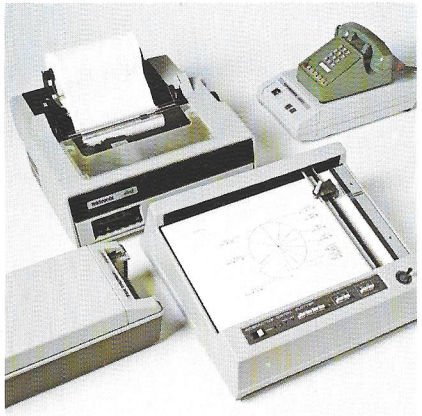
But easy doesn't mean incomplete. The 4025 software support includes bar charts with multiple shadings, histograms, log plots, pie charts, periodic axes, and a wide variety of labeling options. Use the 4025 and PLOT 10 Easy Graphing to expand on an existing data base. You build graphs the way you want, without the restriction of local, limited, built-in functions.

The 4025 lets you define monitor and workspace areas on the screen, and scroll either independently. You can format graphics, alphanumerics and ruled forms in any combination.

Capabilities such as these easily outdraw any other terminal.

You can connect to a number of Tektronix peripherals for all types of copy requirements. Our 4631 copier, for example, will duplicate on-screen and buffered displays of up to 80 characters by 53 lines, and produce them as clean, dry, sharp 8½" x 11" copies. Fit for distribution to customers, management, recordskeeping.

You can command detailed, camera-ready graphic and alphanumeric output—in 9 colors, on up to 11"x17" paper or film—from our first-of-its-kind 4662 Interactive Digital Plotter.

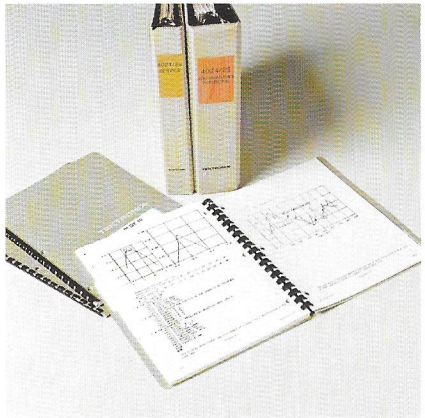


Tektronix peripherals provide plug-in access to many different copying and output capabilities. Our 4642 Printer, 4924 Digital Cartridge Tape Drive, 4931 Modem, and 4662 Interactive Digital Plotter all offer exceptional performance and dependability.

For copying alphanumeric output, you'll find everything you need in our dependable 4642 Printer.

And finally, our 4924 Digital Cartridge Tape Drive, storing up to 200,000 bits per cartridge, is an inexpensive data copying device for forms, graphic formats and other data.

There's one more feature built in to the 4020 Series: Tektronix' ten years in graphics technology. Our thirty-one year corporate reputation has been built on product reliability. On our worldwide team of sales, service, instruction and applications experts.



Core-conscious, user-oriented PLOT 10 software, plus a variety of tutorial and technical manuals, simplify graphics set-up and provide total documentation.

Both the 4024 and 4025 can be everything you'll ever need from a terminal. But you don't have to buy anything before you want it. Like any smart trainee, each starts with the basics and grows with the job. You can see their great potential just by looking at them. So call your local Tektronix Sales Engineer and have him bring by the 4020 Series for a personal, eye-opening interview.

ASSETS (M$)
WORKING CAPITAL
CURRENT ASSETS
LONG TERM DEBT
TOTAL ASSETS
ACCOUNTS RECEIVABLE
INVENTORY & SUPPLIES
DOLLARS
YEAR
EASY GRAPHING
Tektronix 4025
Tektronix

Specifications

Display type: Video monitor
Screen size: 30 cm (12 in) diagonal
Phosphor type: p-39 green phosphor
Raster Lines: Standard 525 line scan
Character size: 7 x 9 in an 8 x 14 dot matrix
Character sets:
- **Standard:** upper and lower case ASCII
- **Optional:** rulings or math characters

Characters/line: 80
Lines/display: 34
Visual attributes: shaded background*, inverted fields or underlines
Logical attributes: protected, modified, alphanumeric, and numeric only.
Transmission speed: independently selectable up to 9600 baud
Interface with host computer:
- **Standard:** RS-232 full duplex
- **Optional:**
  - **Option 1*** RS-232 half duplex
  - **Option 2** 20 current loop
  - **Option 10** Polling Interface
  - **Option 11*** Polling Controller–IBM 3270 compatible

Optional Interfaces with Peripheral devices:
- **Option 3** RS-232, transmit only, for printer.
- **Option 4*** IEEE 488-1975 GPIB for TEKTRONIX 4924 Digital Cartridge Tape Drive or 4662 Interactive Digital Plotter.
- **Option 40*** Hard copy connector for TEKTRONIX 4631 Hard Copy Unit, and standard 75-ohm video output for external video monitor.

Size of display memory: 4K bytes standard; may be expanded to 8K (Option 20), 16K (Option 21), or 32K (Option 22).
Parts of memory:
- **Monitor:** Holds and displays conversational text.
- **Workspace:** Holds and displays text or forms.

Number of keys: 86
Programmable keys: 80
Major keyboard functions: Typewriter keys, terminal function control, programmable function keys, numeric pad, cursor control, scrolling.
Relationship to display: Detachable (flexible 8 foot cable)
Editing keys:
- Delete character
- Delete line
- Erase and skip
- Insert line
- Insert mode

Graphic Specifications*:
- **Graphics* Memory:**
  - **Option 23** 4096 8-bit words
  - **Option 24** 8192 8-bit words
  - **Option 25** 16348 8-bit words
  - **Option 26** 32768 8-bit words
- **Line types*:**
  - Solid lines
  - Seven styles of dashed lines
  - Single points
  - "Dark vectors," which erase lines previously drawn.
- **Type of display*:** Dot matrix: each graphics cell has 14 rows of 8 dots each.

Weight: 27.2 kg (60 lb.)
Dimensions:
- **Cabinet:**
  - **Height** 31.7 cm (12.5 in.)
  - **Width** 44.5 cm (17.5 in.)
  - **Depth** 54 cm (21.25 in.)
- **Keyboard:**
  - **Height** 7.6 cm (3 in.)
  - **Width** 45.7 cm (18 in.)
  - **Depth** 23.5 cm (9.25 in.)

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*4025 Only

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COMMITTED TO EXCELLENCE

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